DOCUMENT RESUME

ED 454 773 HE 034 130

AUTHOR	Stanley, Julian C.; Sandhofer, Lois S.
TITLE	College Graduation before Age 19, Especially at Johns Hopkins University, 1876-1997.
PUB DATE	1997-11-00
NOTE	32p.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Academically Gifted; *Acceleration (Education); Advanced Students; *College Graduates; Higher Education; *Time to Degree; *Young Adults
IDENTIFIERS	*Johns Hopkins University MD

ABSTRACT

This paper describes some students, especially at Johns Hopkins University, Maryland, who have graduated from college 3 or more years before the usual age of 22 or older. Such early graduation is not common, but neither is it extremely rare. Some young graduates seem to have been propelled through college under parental pressure, while others have had facilitative parents who simply helped the child use his or her intellectual precocity well. At Johns Hopkins University, a study was reported in 1982 that described the accomplishments of a number of young graduates. Since that time, 25 more students have completed a bachelor's degree before their 19th birthday. The youngest to graduate from Hopkins graduated at age 15 years 7 months, having graduated from high school at age 12. Young men are more likely to graduate from Hopkins early than are young women, although Johns Hopkins did not graduate its first female undergraduates until 1972. Johns Hopkins ..ad led most other major universities in its flexible age admissions policies. Young applicants are screened carefully, but they need not be high school graduates. Overall, these young graduates have gone on to successful careers, often in academia or medicine. (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

November 1997. Unpublished

College Graduation Before Age 19, Especially at Johns Hopkins University 1876-1997

Julian C. Stanley and Lois S. Sandhofer

Johns Hopkins University

ED 454 773

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. Stanley

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

HE034130

College Graduation Before Age 19, Especially at Johns Hopkins University 1876-1997

Julian C. Stanley and Lois S. Sandhofer

Johns Hopkins University

Graduating from college three or more years before the usual age of 22 or older is not common, but neither is it extremely rare. National news reports have highlighted the most extremely young college graduates, such as Michael Kearney at age 10, from the University of South Alabama in 1995; Adrian DeMello at age 11, from the University of California, Santa Cruz, in 1988; Jay Luo from Boise (Idaho) State University at age 12 in 1982; and Bala Ambati, M.D. degree at age 17 from New York University in 1994. These seem to have been parentally-propelled racers through the educational system, usually not at the most highly selective universities. "Creator" parents--i.e., those who labor from the child's birth to produce a "genius" --are in sharp contrast to "facilitative" parents, who early in their child's life detect marked intellectual precocity and help him or her use it well educationally.

In our Study of Mathematically Precocious Youth (SMPY), begun in 1971, we have observed many other "radical accelerates," such as Donald Marolf (graduate of William Jewell College in Missouri in 1987 at age 15 and Ph.D. in physics, University of Texas, at age 20), and Coleman Miller (Hillsdale College in Michigan in 1984 at age 15 and Ph.D. in astrophysics, California Institute of Technology, in 1990). See Charlton, Marolf, and Stanley (1994) and Stanley (1997).

Less radically accelerated, but superbly educated, is Lenhard ("Lenny") Ng, who in 1996 graduated from Harvard in three years, summa cum laude in mathematics and Phi Beta Kappa, at age 19. In terms of grade placement he was only two years accelerated and had a late birthday

HE034130

(December 8), but his knowledge of mathematics greatly exceeded that of nearly any other college graduate. Also, he had broken most of the middle-school, high-school, and college mathematics competition records. For example, in each of his three college years he was a Putnam Competition Fellow--that is, ranked among the top five undergraduates in the country. Currently, he is working toward a Ph.D. degree in mathematics and physics at the Massachusetts Institute of Technology. For further details, see Charlton, Marolf, and Stanley (1994).

The Johns Hopkins Accelerates

Especially interesting to study are the young graduates of a single college or university throughout its entire history. We did that 15 years ago for Johns Hopkins University, which was founded in 1876 (Stanley & Benbow, 1983). From 1887 through 1982, 32 students had completed the Bachelor's degree before their 19th birthday. Since then, 25 more have done so. Details about all the known young graduates are shown in Table 1.

(Please place Table 1 about here.)

The youngest ever thus far is Chi-Bin Chien, honors B.A. degree in physics in 1981 at age 15 years 7 months. Son of a Johns Hopkins University physics professor, at age 12 he had graduated with much advanced standing from a selective public high school in California.

In the table, data about degrees earned and present occupation are fairly complete. Some summary statistics may bring out features. Nearly half (28) of the 57 have <u>already</u> earned Ph.D. or Sc.D. degrees. At least 8 already have M.D. degrees. At least 4 earned law degrees.

The sex ratio is 45 males to 13 females, i.e., 3.5:1, but Johns Hopkins graduated its first female undergraduates (transfer students) in 1972. The

first of the young women finished in 1979.

As Figure 1 shows, the age distribution (grouped into 12 categories)

(Please put Figure 1 about here.)

is quite negatively skewed. Chien is the only 15-year-old graduate, whereas 63 percent of the group finished at age 18. Even that is remarkable, however, they being at least three years younger than the typical graduate.

Johns Hopkins selects its entering students carefully for ability, so these statistics might not be representative of other universities and colleges. On the one hand, Hopkins attracts able youth. On the other hand, its curricula are more difficult than those of less-selective institutions. I do not know of any persons who graduated from a school of Hopkins' intellectual caliber at less than age 15. The nearest match may be Eugene Volokh, who finished at the University of California, Los Angeles, in 1983, some four months younger than Chien. After nine years as a high-level computer software developer, he entered law school and is now an assistant professor in the UCLA School of Law.

A census like this from other colleges and universities would help us understand better the academic and occupational futures of those who graduate from college unusually young. The Hopkins information and other, less complete, observations suggest, as Pressey (1949) and others have documented, that most fast movers educationally tend to fare well thereafter. They may be a "special breed," however, so we should be cautious not to urge such acceleration for those able youth who are not themselves highly motivated to run the educational track extremely fast. Charlton, Marolf, and Ng provide considerable personal insight into such motivation (Charlton, Marolf, & Stanley, 1994).

Special, Residential Early-Entrance-to-College Programs

We of SMPY believe that for an intellectually brilliant youth to be a regular residential student in college before about age 16 is quite difficult socially, although usually not academically. Fortunately, there are a few college-entrance programs designed specifically for under-age entrants. Boothe, Beheruz, and Stanley (1997) discuss the eight of which they are aware. Four are private: one-year Clarkson School of Clarkson University in New York, four-year Mary Baldwin College (for women only) in Virginia, four-year Simon's Rock Early Entrance College of Bard College in Massachusetts, and the one-year Residential Honors Program of the University of Southern California.

The four state-supported residential programs are the one- or two-year Advanced Academy of the State University of West Georgia; the Georgia Academy of Mathematics, Engineering, and Science of Middle Georgia College, which is a two-year college; the two-year Texas Academy of Leadership in the Humanities of Lamar University; and the two-year Texas Academy of Mathematics and Science of the University of North Texas. Of these four, only the Advanced Academy of Georgia welcomes students from other states.

Each of the eight programs, except for Simon's Rock College (which purports to be only early-entrance), houses its program students separately from the regular-age ones and gives special attention to their social and emotional development. They have far more interacton with their intellectual peers who are also their agemates then they could get in almost any high school.

Eighteen graduates of the Texas Academy of Mathematics and Science (TAMS) have transferred to Johns Hopkins. At TAMS they had completed, via

only college courses, the equivalent of enriched Grades 11 through 14, four years in two. So at about age 18 they became juniors at JHU. Most major in difficult areas such as biology, biomedical engineering, and mechanical engineering. By 1997, 11 had graduated from JHU, seven of them in two years and four in three years (two of these needed only two years but chose to stay one more). On graduation day, the youngest was a few days short of her 17th birthday. None had special academic difficulties. All professed to like being a Hopkins undergraduate, but none remained for graduate or professional study. Most went on to graduate work or medical school elsewhere.

Conclusion

A few youth are able enough, mature enough, and well enough motivated to move along the kindergarten through 16th-grade educational pipelines considerably faster than the usual 17 years or more. There are many combinations of ways to do this (e.g., see Southern, Jones, & Stanley, 1993, page 388, and Brody & Stanley, 1992). In recent years, such special educational opportunities have increased considerably. Johns Hopkins has long led most other major universities in its flexible age admissions policies. Young applicants are screened carefully, but they need not be high school graduates. This and other factors are responsible for its under-age graduates during more than a hundred years. Their subsequent success is remarkable.

References

Boothe, D., Sethna, B. N., & Stanley, J. C. (1997). Special opportunities for exceptionally able high school students: A description of seven residential early-college-entrance programs. Carrollton, GA 30118: Prof. Diane Boothe, State University of West Georgia.

Brody, L. E., & Stanley, J. C. (1991). Young college students: Assessing factors that contribute to success. In W. T. Southern & E. D. Jones (Eds.), The academic acceleration of gifted children (pp. 102-132). New York: Teachers College Press.

Charlton, J. C., Marolf, D. M., & Stanley, J. C. (1994). Follow-up insights on rapid educational acceleration. Roeper Review, 17, 123-130.

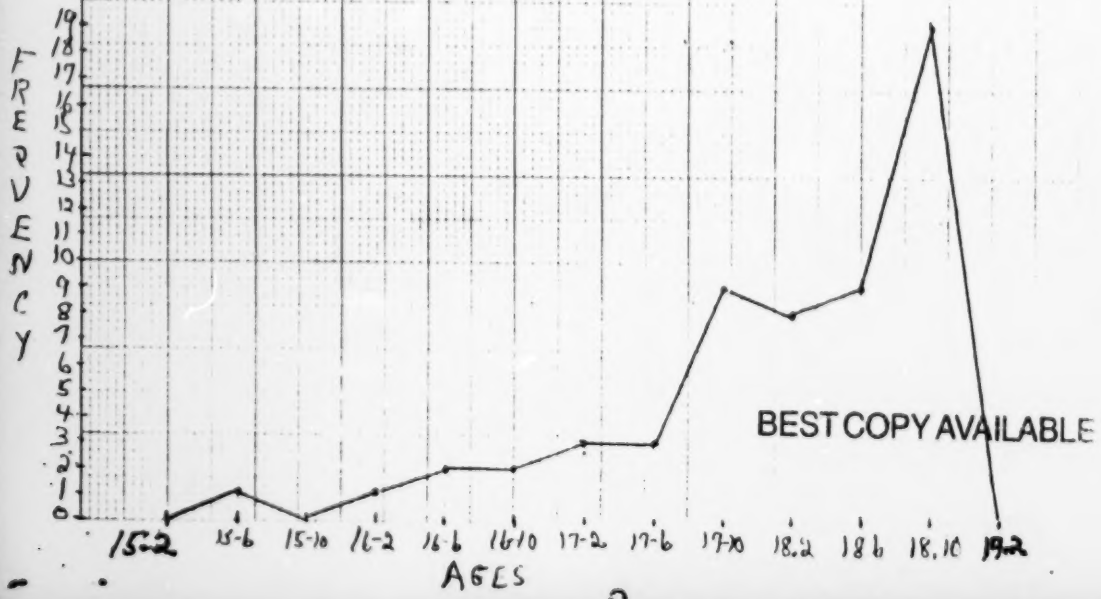
Pressey, S. L. (1949). Educational acceleration. The Bureau of Educational Research Monographs, No. 31. Columbus, Ohio: Ohio State University Press.

Southern, W. T., Jones, E. D., & Stanley, J. C. (1993). In K. A. Heller, F. J. Mönks, & A. H. Passow (Eds.), International handbook of research and development of giftedness and talent (pp. 387-409). New York: Pergamon.

Stanley, J. C. (1997). Varieties of intellectual talent. Journal of Creative Behavior, 31(No. 2, 2nd Quarter), 93-119. Commentaries by Howard Gardner and Joyce VanTassel-Baska, pages 120-130.

Stanley, J. C., & Benbow, C. P. (1983). Extremely young college graduates: Evidence of their success. College and University, 58, 361-371.

Figure 1: JHU Graduates Before Age 19, 1876 - 1997



BEST COPY AVAILABLE

Rough draft, half-scale. About what one would expect from a symmetrical, unimodal distribution of the ages of all JHU freshmen. It would probably have a longer tail to the right, however.

The 57 Known Recipients of the Bachelor's Degree from The Johns Hopkins University at Age 18 or Younger, 1876 - 1996

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
CHIEN, Chi-Bin	15/7	Nov. 3, 1965	Physics	B.A. May 29, 1981 in physics Ph.D. in Biophysics, CA Inst. of Tech. June 15, 1990.	General & departmental honors; SMPY Precocious Youth Award (youngest graduate in JHU's 120 years), 1981; Donald E. Kerr Memorial Medal in Physics, JHU, 1981; Churchill Scholarship (Lewis Douglas Scholar), Cambridge Univ., 1981-1982; NSF three-year Graduate Fellowship. 1981-84.	Postdoctoral Fellow, Dept. of Biology, Univ. of CA, Berkeley
STILLER, Lewis Benjamin	16/2	Oct. 29, 1965	Mathematical Sciences Computer Science	Satisfied degree requirements Dec. 31, 1981; B.A. May 27, 1982 Ph.D. in computer science May 1995	General honors	Postdoctoral Fellow, Dept. of Computer Science, Univ. of CA - Berkeley
KELLER, John Apeler	16/5	Dec. 14, 1964	Biology	B.A. May 29, 1981 Ph.D. Jan. 16, 1987 Waksman Institute (joint degree) - Rutgers, The State Univ. of NJ and Univ. of Med. & Dentistry of NJ	General honors NJ State Grad. Fellowship, 1981-1984; Charles & Johanna Busch Memorial Grad. Fellowship, 1984-1987	Dir. Advanced Technologies in Genetics, Smith Kline Beecham Pharmaceuticals, King of Prussia, PA

Name	Age When Baccalaureate Received	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
HASKINS, Charles Homer	16/6	Dec. 21, 1870	History	A.B. June 14, 1887 Ph.D. June 12, 1890	(Phi Beta Kappa began at JHU in 1895. No honors records available.)	Deceased May 14, 1937. Formerly, Professor of History Univ. of Wisconsin (at age 21) and then Harvard Univ., & Dean, Graduate School of Arts & Sciences, Harvard Univ.; many other honors
SAEED, Alexander I.	16/8	May 7, 1979	Psychology	Satisfied degree requirements Dec. 1995 B.A. May 22, 1996		Software engineer, Inst. for Genomic Research, Rockville, MD
KALIHER, Kevin Paul	16/11	June 24, 1973	Humanities Studies	B.A. May 24, 1990		Los Angeles, CA Hanna Barbera animation cartoons
REN, Jane	17/0	June 4, 1979	Biology	B.A. May 22, 1996		Medical school student, San Antonio, TX
CAMERER, Colin Farrell	17/1	Dec. 4, 1959	Quantitative Studies	Satisfied degree requirements Dec. 31, 1976; B.A. May 27, 1977 M.B.A. Univ. of Chicago, June 1979 Ph.D. Univ. of Chicago, Dec. 1981	Dupont Fellowship 1978, 1979, 1980; Theodore O. Yntema Research Grant, 1980	Prof. of Strategy & Behavior Sci., Grad. School of Business Univ. of Chicago, 1992-94; Rea & Lela Axline Prof. of Business Economics, Caltech, 1994 -

Name	Age When Baccalaureate Received (Yrs. & Mos.	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
FELDMAN, William Taft	17/3	Mar. 4, 1909	Political Science Philosophy	B.A. June 8, 1926 Ph.D. June 14, 1932	Phi Beta Kappa	Died. Nov. 4, 1976
RIN-Laures, Li-Hsien ("Lily")	17/5	Jan. 6, 1967	Chemistry	B.A. May 25, 1984 M.D. June 1988 Northwestern Univ. J.D. June 1992 Harvard Law School	General honors; Alpha Epsilon Delta Cum Laude	Patent Attorney, Marshall, O'Toole; Chicago, IL
STERNBERG, Shlomo Zvi	17/5	Jan. 20, 1936	Mathematics	B.A. May 25, 1984 M.A. Nov. 7, 1953 Ph.D. Nov. 3, 1956	Phi Beta Kappa; General & Departmental honors	Harvard Univ., Professor of Mathematics
BATES, Joseph Louis	17/7	Oct. 20, 1955	Quantitative Studies Electrical Engineering Computer Science	B.A. May 25, 1973 M.S. Engr. Aug. 29, 1973 Ph.D., Cornell Univ., Aug. 19, 1979		Carnegie-Mellon Univ., Research Professor, Computer Science
PRESCOTT, Katherine Durkish	17/8	Sept. 27, 1979	Earth & Plan. Sciences	B.A. May 22, 1997	General honors	
DIETZ, Paul Frederick	17/9	Aug. 31, 1959	Electrical Engineering	B.E.S. May 27, 1977 Ph.D. Cornell Univ., Aug. 31, 1984	Phi Beta Kappa; Tau Beta Pi; General & Departmental honors; NSF graduate fellowship	Lead software engineer; Technology Center, Motorola, Land Mobile Products, Schaumburg, IL

Name	Age When Baccalaureate Recieved (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
PISTRITTO, Joseph Charles	17/10	Oct. 1, 1960	Electrical Engineering	Satisfied degree requirements Aug. 15, 1978 B.E.S. May 31, 1979 M.S. Engineering Jan. 7, 1980	General & departmental honors Tau Beta Pi Eta Kappa Nu	Director of Development, Network Products, Div. of Oracle Systems Corp.
BALMACEDA, Margarita Mercedes	17/10	Feb. 16, 1965	International Studies	Satisfied degree requirements Dec. 31, 1982; B.A. May 27, 1983 M.A. Princeton 1985 Ph.D. Princeton, June 1996		Professor (political science), University of Toledo, Ohio
EDIDIN, Dan Samuel	17/10	July 30, 1968	Mathematics Mathematics	B.A. May 31, 1986 M.A. May 31, 1986 Ph.D. June 3, 1991	General & departmental honors, Phi Beta Kappa	
KAO, Wynn	17/11	June 11, 1971	Biomedical Engineering	B.A. May 25, 1989	General & departmental honors, Scholarships from NIH, medical scientist training program	M.D./Ph.D. student, Harvard Med. School/ MIT
AMBATI, Jayakrishna	17/11	June 21, 1970	Electrical & Comp.Engr.	B.E.S. May 26, 1988 M.D./Ph.D. May 1994 New York University	IEEE Research Award Alpha Omega Alpha	Resident, Opthamology, Univ. of Rochester
STARK, Eugene William	17/11	July 10, 1959	Electrical Engineering	B.E.S. May 27, 1977 M.S. Jan. 1980, MIT Ph.D. June 1984, MIT	General & departmental honors, Tau Beta Pi	Assoc. Professor, Comp. Sci., SUNY-Stony Brook

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
EAGLE, Harry	17/11	July 13, 1905	Medicine	A.B. June 12, 1923 M.D. 1927	Hopkins Scholar	Deceased June 12 1992. Formerly a professor at Albert Einstein College of Medicine
DRYDEN, Hugh Latimer	18/1	July 2, 1898	Physics	A.B. June 12, 1916 Ph.D. June 24, 1919	Phi Beta Kappa	Deceased Dec. 2, 1965. Formerly Principal Physicist National Bureau of Standards, & Deputy Director, NASA
BHATIA, Ajay Kamel	18/1	April 30, 1979	Biology	B.A. May 22, 1997	Phi Beta Kappa General honors	
SEBRING III, Clair William	18/1	April 12, 1960	Mathematical Sciences	B.A. May 26, 1978 M.S. Univ. of CA, Santa Barbara, CA May 1981		Westinghouse Corp., Baltimore, MD
YARVIN, Norman	18/2	April 18, 1971	Electrical & Comp. Sci. Comp. Sci.	B.S. May 25, 1989 M.S. Yale Univ. May 24, 1990 Ph.D. Yale Univ. May 26, 1997		

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
STOCKTON, Robert Gregory	18/2	Mar. 31, 1964	Mathematical Sciences	B.A. Engineering, May 27, 1982		Research Programmer, Carnegie Mellon Univ.
DICK, Jeffrey Marc	18/3	Mar. 6, 1968	Mathematics Medicine	B.A. May 31, 1986 M.D. May 19, 1990, Medical College of VA		Pediatrician, Rabbinical student, New York, NY
SUNDARAM, Tessa Alvonsaamary	18/3	Oct. 25, 1978	Biomedical Engineering	Satisfied degree requirements Jan. 1997, B.S. Biomedical Eng. May 22, 1997	Tau Beta Pi, General & Departmental honors	
KURRELMEYER, Bernard	18/3	Mar. 27, 1903	Physics	A.B. June 21, 1921 Ph.D. 1924	Phi Beta Kappa	Died 1985; Professor Emeritus of Physics, Brooklyn College)1931-71).
BACH, Edward Lesem	18/4	Aug. 17, 1962	Mathematics	Satisfied degree requirements Dec. 31, 1980; B.A. May 26, 1981	General & Departmental honors; Delta Phi Alpha, national German honorary society	Captec. Malahide Co., Dublin, Ireland
LIU, Kimberley Ellen	18/4	Jan. 26, 1997	Biology	B.A. May 22, 1997	General honors	
STRAUCH, Eric David	18/5	Dec. 13, 1964	Biology	B.A. May 27, 1983 M.D. May 20, 1988 Univ. of MD Med. Sch.	Alpha Omega Alpha. honorary medical society	Asst. Professor of Pediatric Surgery, Univ. of MD, Baltimore

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors and Awards at Graduation	Current Location
STERN, Eric Groman	18/5	Dec. 15, 1961	Physics	B.A. May 30, 1980 M.A. Dec. 1983, SUNY - Stony Brook Ph.D. May 19, 1986		Fermi Labs, Batavia, IL
MERCIA, Pankaj	18/5	Nov. 23, 1973	Biomed. Engr. & Mathematics	B.S. May 21, 1992	General & Departmental honors	Harvard Med. School/MIT MD program, Boston, MA
KOTSCHENREUTHER, Michael Thomas	18/6	Nov. 24, 1958	Physics	B.A. May 26, 1977 Ph.D. Dec. 1982, Princeton Univ.	Phi Beta Kappa; General & Departmental honors; NSF graduate fellowship	Researcher in plasma physics, Univ. of Texas - Austin
WILLIAMS, Michael Grant	18/7	Oct. 21, 1971	Economics	B.A. May 25, 1989 Ph.D. June 9, 1992, Princeton Univ.	Phi Beta Kappa; General & Departmental honors	Asst. Professor, Business Mgmt. U.C.L.A.
HOUSER, Christine Marie	18/7	Nov. 16, 1967	Psychology	B.A. May 31, 1986 M.Phil. May 1992, Cognitive Neuroscience M.D. Johns Hopkins School of Medicine May 1996		Resident in Emergency medicine North Shore Univ. Hospital - NYU
ZAFREN, Herbert Cecil	18/7	Aug. 25, 1925	Latin	B.A. Mar. 31, 1944	Phi Beta Kappa	Cincinnati, OH: Director Emeritus of Libraries & Prof. Emeritus of Jewish Bibliography, Hebrew Union College--Jewish Inst. of Religion

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
ZUCKER, David Michael	18/8	Sept. 21, 1961	Mathematical Sciences	B.A. May 30, 1980 M.A. May 29, 1981 Ph.D. May 30, 1986	Phi Beta Kappa; Math Sciences Award; General & Departmental honors	Mathematical statistician, National Heart, Lung, & Blood Inst., NIH, Washington, DC
HOSTETLER, Larry Blythe	18/8	April 16, 1970	Comp. Sci.	B.A. Jan. 1, 1989 M.S. July 31, 1991	General & Departmental honors	Programmer in Phoenix, AZ
FAX, David Hirsch	18/8	Oct. 4, 1919	Mechanical Engineering	B. Engr. June 4, 1938	Graduated with honors; Tau Beta Pi	Retired from Westinghouse Corp.
ZEI, Paul C.	18/9	April 1, 1970	Biomedical Engineering	B.A. Jan. 1, 1989	General & Departmental honors	M.D./Ph.D. program Stanford Univ.
DAGGETT, Lynn Marie	18/9	April 7, 1961	Psychology; Educational Psychology	Satisfied degree requirements Dec. 31, 1979; B.A. May 30, 1980 Ph.D. Duke Univ., May 6, 1984 J.D. degree, Univ. of CT, summa cum laude, May 24, 1987		Asst. Prof. School of Law, Gonzaga Univ., Spokane, WA
WASSERMAN, Harry	18/9	Sept. 17, 1899	Mathematics Medicine	A.B. June 11, 1918 M.D. 1922	Phi Beta Kappa	Practicing physician until his death, Feb. 24, 1983

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
KORIN, Anne Hannah	18/10	July 27, 1872	Comp. Sci.	B.S. May 23, 1991	Departmental honors	Ph.D. program, Stanford Univ.
RAFFEL, Sydney	18/10	Aug. 24, 1911	Medicine	A.B. June 10, 1920 Sc.D. Johns Hopkins Sch. of Hygiene & Public Health, June 13, 1933 M.D., Stanford, 1943		Prof. Emeritus, Dermatology and Medical Microbiology, Stanford University
CHANG-SMITH, Esther Sun-A	18/10	July 11, 1972	Material Sci. & Engineering	B.S. May 23, 1991 M.S. Metal Sci. Engr., Penn State Univ., 1993		Yale Univ. School of Management, Master of Public & Private Mgmt. expected 1998
ALEXION, Christopher Constantine	18/10	Aug. 9, 1960	Mechanics & Materials Science	B.E.S. May 31, 1979 M.S. Engr. in Mech. Engr., Carnegie-Mellon University, Dec. 1982		Pittsburgh, PA, Self-employed
AKBARI, Suzanne Eliz. Conklin	18/10	July 19, 1965	Humanistic Studies Area	B.A. May 25, 1984 M.A., English, Columbia Univ., May 1989 M. Phil. May 1991 Ph.D. Feb. 1995, English, Columbia University		Asst. Prof. of English & Medieval Studies, Univ. of Toronto

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
BIRX, Daniel Lloyd	18/10	July 16, 1954	Physics	B.A. May 25, 1973 M.S. Univ. of Miami in Ohio, June 5, 1975 Ph.D. Univ. of CA at Santa Barbara, March 23, 1978		Consultant, Mechanicsburg, PA
COREY, Victoria Roslyn D'Ull	18/10	July 22, 1968	Psychology	B.A., May 28, 1987 Ph.D. June 1994, Univ. of Washington, Cognitive Science		Rent-a-clue, The Leftbank Operation, Somerville, MA
FRANGOS, John A.	18/11	July 8, 1961	Chemical Engineering	B.E.S. May 29, 1981 M.S., Chem. Engr., Stanford Univ., 1982 Ph.D., Chem. Engr., Rice Univ., 1988	Presidential Young Investigator Award, Y. C. Fung Young Investigator Award of the Amer. Soc. of Mech. Engr. for Research in Bio-Engineering	Asst. Prof., Dept. of Bio-engineering, Univ. of CA at San Diego
MUKHERJEE, Aseet	18/11	July 7, 1961	Physics High-energy Physics	B.A. May 30, 1980 Ph.D., MIT, 1986	Donald E. Kerr Memorial Medal for Physics Honors Scholarship from Physics Dept., MIT	Fermi Laboratory, Batavia, IL
THOMSEN, Roszel Cathcart	18/11	Aug. 17, 1900	History & Pol. Economy Law	A.B. June 24, 1919 L.L.B., Univ. of Maryland, June 1922	Phi Beta Kappa Omicron Delta Kappa	Deceased 3/1/92. Formerly, Senior Judge, U.S. District Court for MD, appointed by Pres. Eisenhower for life on May 17, 1954

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates[1]	Honors & Awards at Graduation	Current Location
GREENBERG, Mark David	18/11	July 11, 1963	Humanistic Studies	B.A. May 27, 1982	Phi Beta Kappa; General honors	Junior Research Fellow in philosophy, Jesus College, Univ. of Oxford, and Dept. of Justice, Washington, DC
			Law	J.D. Univ. of CA, Berkeley, May 1985	Order of the Coif	
			Law	Diploma, post-grad. legal studies, Univ. of Stockholm, Sweden, June 1986	Fulbright Scholar, Gessel Foundation Award	
			Philosophy	B. Phil., Univ. of Oxford, June 1990	Marshall Scholar, Oxford Univ.	
YOUNG, Albert Min-Hsien	18/11+	June 13, 1967	Physics and Mathematics	B.A. May 31, 1986	General & Departmental honors	Member, technical staff, Lincoln Laboratory, Lexington, MA
				M.S.E.E., 1989, MIT		
				Ph.D., Elec. Engr., Feb. 1994, MIT		
MORISHIGE, Nina Teresa	18/11+	June 5, 1963	Mathematics	B.A. May 27, 1982	Phi Beta Kappa; General & Departmental honors; Rhodes Scholar; Churchill Scholarship, Cambridge Univ. (declined)	Doctoral student, Univ. of CA, Berkeley, Math Department

[1]Unless otherwise noted, degrees were earned at Johns Hopkins. Moreover, unless otherwise noted, major field was identical for undergraduate and graduate work. The first Johns Hopkins baccalaureates (3) were awarded in 1879. At that time they required three years of study, rather than the present four.